

## Revision on Decimals

1.  $3.56 + 6.7 = 10.26$
2.  $4.7 - 1.9 = 2.8$
3.  $7.9 + 9.81 = 17.71$
4.  $9.87 - 5.89 = 3.98$
5.  $2.5 \times 6 = 15$
6.  $9.8 \times 1.23 = 12.054$
7.  $2.2 + 6.9 = 9.1$
8.  $80.1 - 2.9 = 77.2$
9.  $3.3 \times 5.5 = 18.15$
10.  $2.99 + 6.15 = 9.14$

$$\begin{array}{r} 3.56 \\ + 6.70 \\ \hline 10.26 \end{array}$$

$$\begin{array}{r} 4.7 \\ - 1.9 \\ \hline 2.8 \end{array}$$

12-9-2011

$$\begin{array}{r} 7.90 \\ + 9.81 \\ \hline 17.71 \end{array}$$

$$\begin{array}{r} 9.87 \\ - 5.89 \\ \hline 3.98 \end{array}$$

$$\begin{array}{r} 2.5 \\ \times 6 \\ \hline 15.0 \end{array}$$

$$\begin{array}{r} 1.23 \\ \times 9.8 \\ \hline 110.70 \\ 984 \\ \hline 12.054 \end{array}$$

$$\begin{array}{r} 2.2 \\ + 6.9 \\ \hline 9.1 \end{array}$$

$$\begin{array}{r} 80.1 \\ - 2.9 \\ \hline 77.2 \end{array}$$

$$\begin{array}{r} 3.3 \\ \times 5.5 \\ \hline 1650 \\ 165 \\ \hline 18.15 \end{array}$$

$$\begin{array}{r} 2.99 \\ + 6.15 \\ \hline 9.14 \end{array}$$

## Division of decimals – Exercise 1

1.  $15.6 \div 4 = 3.9$
2.  $6.3 \div 7 = 0.9$
3.  $6.6 \div 5 = 1.32$
4.  $36 \div 50 = 0.72$
5.  $100 \div 40 = 2.5$
6.  $1 \div 20 = 0.05$
7. Mum spent \$37.20 on 3 kg of sweets. How much did each kilogram of sweets cost?  
 $37.2 \div 3 = 12.4$
8. Lily divided 1.8 L of ice cream into 12 cups equally. How many litres of ice cream did each cup contain?  
 $1.8 \div 12 = 0.15$
9. 5 pencils can be bought with \$4. How much does each pencil cost?  
 $4 \div 5 = 0.8$
10. 32 dumplings weigh 328g. How much grams does each dumpling weigh on average?  
 $328 \div 32 = 10.25$

$\begin{array}{r} 15.6 \div 4 \\ = 3.9 \end{array}$	$\begin{array}{r} 3.9 \\ 4 \overline{)15.6} \\ \underline{12} \phantom{00} \\ 36 \\ \underline{36} \\ 0 \end{array}$	$\begin{array}{r} 6.3 \div 7 \\ = 0.9 \end{array}$	$\begin{array}{r} 0.9 \\ 7 \overline{)6.3} \\ \underline{63} \\ 0 \end{array}$
$\begin{array}{r} 6.6 \div 5 \\ = 1.32 \end{array}$	$\begin{array}{r} 1.32 \\ 5 \overline{)6.6} \\ \underline{5} \phantom{00} \\ 16 \\ \underline{15} \\ 10 \end{array}$	$\begin{array}{r} 36 \div 50 \\ = 0.72 \end{array}$	$\begin{array}{r} 0.72 \\ 50 \overline{)360} \\ \underline{350} \phantom{00} \\ 100 \\ \underline{100} \\ 0 \end{array}$
$\begin{array}{r} 100 \div 40 \\ = 2.5 \end{array}$	$\begin{array}{r} 2.5 \\ 40 \overline{)100} \\ \underline{80} \phantom{00} \\ 200 \\ \underline{200} \\ 0 \end{array}$	$\begin{array}{r} 1 \div 20 \\ = 0.05 \end{array}$	$\begin{array}{r} 0.05 \\ 20 \overline{)100} \\ \underline{100} \\ 0 \end{array}$
$\begin{array}{r} 37.2 \div 3 \\ = 12.4 \end{array}$ <p>Each kg of sweets costs \$12.4</p>	$\begin{array}{r} 12.4 \\ 3 \overline{)37.2} \\ \underline{36} \phantom{00} \\ 12 \\ \underline{12} \\ 0 \end{array}$	$\begin{array}{r} 1.8 \div 12 \\ = 0.15 \end{array}$ <p>Each cup contains 0.15 L of ice cream</p>	$\begin{array}{r} 0.15 \\ 12 \overline{)1.8} \\ \underline{12} \\ 0 \end{array}$
$\begin{array}{r} 4 \div 5 \\ = 0.8 \end{array}$ <p>Each pencil costs \$0.8</p>	$\begin{array}{r} 0.8 \\ 5 \overline{)40} \\ \underline{40} \\ 0 \end{array}$	$\begin{array}{r} 328 \div 32 \\ = 10.25 \end{array}$ <p>Each dumpling weighs 10.25 g in average</p>	$\begin{array}{r} 10.25 \\ 32 \overline{)328} \\ \underline{32} \phantom{00} \\ 80 \\ \underline{64} \phantom{00} \\ 160 \\ \underline{160} \\ 0 \end{array}$

### Division of decimals – Exercise 3

For Q1 to Q4, round off the answers to the nearest tenth.

1.  $0.4 \div 2.3 \approx 0.2$     2.  $3.33 \div 1.1 \approx 3.0$     3.  $30 \div 7 \approx 4.3$     4.  $1 \div 6 \approx 0.2$
5. Kevin has \$2.70. If he divides the amount into groups of \$0.50, how many groups are there? How much money has he left?
6. Each picture card costs \$4.50. If Kate has \$40, how many picture cards can he buy? How much money has she left?
7. A toy car costs \$48.50. If Kevin saves \$3.50 each day, how many days does he need to save enough money to buy the toy car? After buying it, how much money has he left?
8. David has a stick that is 5.65m long. If he divides it into sections of 0.25m, how many sections are there? How many metres of the stick has he left over?
9. If Tom divides 10.5kg of sugar into packets of 0.45kg, how many packets of sugar are there? How many kilograms of sugar has he left over?

<p>① <math>0.4 \div 2.3</math></p> <p><math>= 4 \div 23</math></p> <p><math>\approx 0.17</math></p> <p><math>\approx 0.2</math> (nearest tenth)</p>	<p>② <math>3.33 \div 1.1</math></p> <p><math>= 33.3 \div 11</math></p> <p><math>\approx 3.02</math></p> <p><math>\approx 3.0</math> (nearest tenth)</p>	<p>③ <math>30 \div 7</math></p> <p><math>\approx 4.28</math></p> <p><math>\approx 4.3</math> (nearest tenth)</p>
<p>④ <math>1 \div 6</math></p> <p><math>\approx 0.16</math></p> <p><math>\approx 0.2</math> (nearest tenth)</p>	<p>⑤ <math>2.7 \div 0.5</math></p> <p><math>= 27 \div 5</math></p> <p><math>= 5 \text{ R } 2</math></p> <p>There are 5 groups of \$0.50.</p> <p>\$0.2 has left.</p>	<p>⑥ <math>40 \div 4.5</math></p> <p><math>= 400 \div 45</math></p> <p><math>= 8 \text{ R } 4</math></p> <p>He can buy 8 picture cards.</p> <p>\$4 has left.</p>
<p>⑦ <math>48.5 \div 3.5</math></p> <p><math>= 485 \div 35</math></p> <p><math>= 13 \text{ days} \dots \\$3</math></p> <p><math>14 \times 3.5 = 49</math></p> <p><math>= 49 - 48.5 = 0.5</math></p> <p>He need to save for 14 days and \$0.5 left after buying the toy car.</p>	<p>⑧ <math>5.65 \div 0.25</math></p> <p><math>= 56.5 \div 2.5</math></p> <p><math>= 22 \dots 0.15</math></p> <p>There are 22 sections 0.25m</p> <p>and 0.15 m has left.</p>	<p>⑨ <math>10.5 \div 0.45</math></p> <p><math>= 1050 \div 45</math></p> <p><math>= 23 \text{ R } 0.15</math></p> <p>There are 23 packets of sugar and 0.15 kg has left over.</p>



## Division of decimals – Exercise 4

- 3 packets of steak weigh 12.6 kg. How many kilograms do 7 packets of steak weigh?
- There are 80 bottles of honey. Each bottle contains 0.5 L of honey. If we pour the honey into jars of 1.25 L, how many jars of honey are there?
- 0.8 kg of fish balls can be bought with 48.60. If Mum buys 3.6 kg, how much should she pay?
- There are 4 packets of pork chops. Each packet weighs 1.75 kg. They are put into 20 boxes equally. How many kilograms of pork chops does each box contain?
- A dozen chicken wings cost \$43.20. If Mum buys 8 chicken wings, how much should she pay?
- The price of 3.2 kg of melons is the same as the price of 5 kg of pumpkins. If each kilogram of pumpkins costs 44.80, how much does each kilogram of melons cost?
- Jenny spent \$34.40 on a fish which weighed 0.8 kg. David bought a fish which weighed 0.6 kg. How much did David pay?

$$\textcircled{1} \quad 12.6 \div 3 \times 7$$

$$= 29.4$$

7 packets of  
steak weigh 29.4 kg

$$\begin{array}{r} 4.2 \\ 3 \overline{) 12.6} \\ \underline{12} \phantom{6} \\ 6 \phantom{6} \\ \underline{6} \phantom{6} \\ 0 \phantom{6} \end{array}$$

$$\textcircled{2} \quad 0.5 \times 80 \div 1.25$$

$$= 40 \div 1.25$$

$$= 4000 \div 125$$

$$= 32$$

There are 32 jars  
of honey

$$\begin{array}{r} 80 \\ \times 0.5 \\ \hline 400 \end{array}$$

$$\begin{array}{r} 32 \\ 125 \overline{) 4000} \\ \underline{375} \phantom{00} \\ 250 \phantom{0} \\ \underline{250} \phantom{0} \\ 0 \phantom{0} \end{array}$$

$$\textcircled{3} \quad 48.60 \div 0.8 \times 3.6$$

$$= 486 \div 8 \times 3.6$$

$$= 218.7$$

She should pay  
\$218.7

$$\begin{array}{r} 60.75 \\ 8 \overline{) 486} \\ \underline{48} \phantom{0} \\ 60 \phantom{0} \\ \underline{56} \phantom{0} \\ 40 \phantom{0} \\ \underline{40} \phantom{0} \\ 0 \phantom{0} \end{array}$$

$$\begin{array}{r} 60.75 \\ \times 3.6 \\ \hline 36450 \\ 182250 \\ \hline 218700 \end{array}$$

$$\textcircled{4} \quad 1.75 \times 4 \div 20$$

$$= 7 \div 20$$

$$= 0.35$$

Each box contain  
0.35 kg of pork chops

$$\begin{array}{r} 1.75 \\ \times 4 \\ \hline 7.00 \\ \hline 0.35 \\ 20 \overline{) 7} \\ \underline{60} \phantom{00} \\ 100 \phantom{00} \end{array}$$

$$\textcircled{5} \quad 43.2 \div 12 \times 8$$

$$= 3.6 \times 8$$

$$= 28.8$$

She should pay  
\$28.8

$$\begin{array}{r} 3.6 \\ 12 \overline{) 43.2} \\ \underline{36} \phantom{00} \\ 72 \phantom{00} \\ \underline{72} \phantom{00} \\ 0 \phantom{00} \end{array}$$

$$\begin{array}{r} 3.6 \\ \times 8 \\ \hline 28.8 \end{array}$$

$$\textcircled{6} \quad 44.8 \times 5 \div 3.2$$

$$= 224 \div 3.2$$

$$= 2240 \div 32$$

$$= 70$$

Each kg of melons  
cost \$70

$$\begin{array}{r} 44.8 \\ \times 5 \\ \hline 224.0 \end{array}$$

$$\begin{array}{r} 70 \\ 32 \overline{) 2240} \\ \underline{224} \phantom{00} \\ 0 \phantom{00} \end{array}$$

$$\textcircled{7} \quad 34.4 \div 0.8 \times 0.6$$

$$= 344 \div 8 \times 0.6$$

$$= 43 \times 0.6$$

$$= 25.8$$

David paid \$25.8

$$\begin{array}{r} 43 \\ 8 \overline{) 344} \\ \underline{32} \phantom{00} \\ 24 \phantom{00} \\ \underline{24} \phantom{00} \\ 0 \phantom{00} \end{array}$$

$$\begin{array}{r} 43 \\ \times 0.6 \\ \hline 25.8 \end{array}$$

# Mixed operations of decimals – Exercise 5

- $7.8 + 3.7 \times 2.9 =$
- $12.6 - 17.6 \div 2.2$
- $1.8 + 10.3 \times 0.5 - 2.38$
- $3.6 \times 8 - 5.4 \div 5$
- Kate had \$87.40. After spending \$12.50 each day for 3 days, she donated the remaining money to charity. How much money did she donate?
- Each can of apple juice cost \$4.80. Kevin bought 6 cans of apple juice. He has \$2.30 left. How much money did he have originally?
- A hawker bought some oranges at \$1.20 each. He sold them at \$10 for 4 oranges. If Mrs Cheung bought a dozen oranges, how much did the hawker earn?
- The capacity of a can of green tea is 0.34 L. The capacity of a can of lemon tea is the same as that of the green tea. Each can of green tea costs \$7. Each can of lemon tea costs \$6.20. How much more expensive is 1 L of green tea than 1 L of lemon tea? (Round off the answer to the nearest tenth.)

$$\begin{aligned} ① \quad & 7.8 + 3.7 \times 2.9 \\ & = 7.8 + 10.73 \\ & = \underline{18.53} \end{aligned}$$

$$\begin{array}{r} 3.7 \\ \times 2.9 \\ \hline 740 \\ 233 \phantom{0} \\ \hline 10.73 \\ + 7.80 \\ \hline 18.53 \end{array}$$

$$\begin{aligned} ② \quad & 12.6 - 17.6 \div 2.2 \\ & = 12.6 - 176 \div 22 \\ & = 12.6 - 8 \\ & = \underline{4.6} \end{aligned}$$

$$\begin{array}{r} 12.6 \\ - 8.0 \\ \hline 4.6 \end{array}$$

$$\begin{aligned} ③ \quad & 1.8 + 10.3 \times 0.5 - 2.38 \\ & = 1.8 + 5.15 - 2.38 \\ & = \underline{4.57} \end{aligned}$$

$$\begin{array}{r} 10.3 \\ \times 0.5 \\ \hline 5.15 \\ + 1.8 \\ \hline 6.95 \\ - 2.38 \\ \hline 4.57 \end{array}$$

$$\begin{aligned} ④ \quad & 3.6 \times 8 - 5.4 \div 5 \\ & = 28.8 - 1.08 \\ & = \underline{27.72} \end{aligned}$$

$$\begin{array}{r} 3.6 \\ \times 8 \\ \hline 28.8 \\ - 1.08 \\ \hline 27.72 \end{array}$$

$$\begin{aligned} ⑤ \quad & 87.40 - 12.50 \times 3 \\ & = 87.40 - 37.50 \\ & = \underline{49.90} \end{aligned}$$

Kate donated  
\$49.90 to the  
charity

$$\begin{aligned} ⑥ \quad & 4.8 \times 6 + 2.3 \\ & = 28.8 + 2.3 \\ & = \underline{31.1} \end{aligned}$$

Kevin had \$31.10  
originally

$$\begin{aligned} ⑦ \quad & (10 \div 4 - 1.2) \times 12 \\ & = 1.3 \times 12 \\ & = \underline{15.6} \end{aligned}$$

The hawker earned  
\$15.60

$$\begin{aligned} ⑧ \quad & (7 - 6.2) \div 0.34 \\ & = 0.8 \div 0.34 \\ & \approx \underline{2.35} \end{aligned}$$

≈ 2.4 (round off to  
nearest tenth)  
1L of green tea is  
\$2.40 more expensive  
than 1L of lemon tea.